

## DISTRIBUTION OF JUNCUS IN ILLINOIS

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This article is intended for use as a supplement to A Taxonomic Study of Juncus in Illinois. Am. Midl. Nat. 71 (2): 296-319. 1964. I based that study (done in 1961-1962) on specimens from the herbaria of the following institutions: Chicago Museum of Natural History (F), Illinois State Museum, Springfield (ISM), Illinois Natural History Survey, Urbana (ILLS), University of Illinois, Urbana (ILL), University of Illinois, Chicago (CHI), Southern Illinois University, Carbondale (SIU).

In October-December 1965, the above herbaria were searched for additional material, and the collections of the Missouri Botanical Garden, St. Louis (MO) and Western Illinois University, Macomb (WIU) were examined. I wish to thank the curators of all the herbaria for the opportunity to see their collections.

During the course of these studies, specimens were encountered which sometimes alter the distribution of Juncus in Illinois as shown on the maps included by G.N.Jones & G.D.Fuller in Vascular Plants of Illinois 1955 and G.S.Winterringer & R.A.Evers in New Records for Illinois Vascular Plants 1960. The sequence of species below follows DeFilipps (1964).

1. Juncus secundus Beauv., in Poiret, Encycl. Method. Bot. Suppl. 3: 160. 1813. (Map 1)

Representative Specimens: GALLATIN CO.: SW. of Gibsonia, Evers 23509 (ILLS). HARDIN CO.: E. of Lamb, Evers 45053 (ILLS). JOHNSON CO.: Fern Clyffe, Bollwinkel & Windler FC37 (SIU). POPE CO.: 1 mi. SW. of Renshaw, Evers 45202 (ILLS). SALINE CO.: Old Indian Stonefort, Bailey & Swayne 1661 (SIU). UNION CO.: Panther's Den, MacMahon 323 (SIU).

2. Juncus dudleyi Wieg. in Bull. Torrey Club 27: 524. 1900. (Map 2)

Representative Specimens: ALEXANDER CO.: Cache, Cranwill s.n. (ILL). BOONE CO.: E. of Irene, Fell 54781 (ISM). CARROLL CO.: Mississippi Palisades, Wunderlin 2099 (WIU). CASS CO.: Beardstown, McDonald s.n. (ILL). CHAMPAIGN CO.: Urbana, Jones 17902 (ILL). CLAY CO.: Larkingsburg Township, Evers 23815 (ILLS). COLES CO.: 3 mi. E. of Charleston, Evers 34502 (ILLS). COOK CO.: Morton Grove, Glassman 4439 (CHI). DE KALB CO.: W. of Sandwich, Evers 33652 (ILLS). DU PAGE CO.: W. of Wheaton, Moffatt 769 (ILL). EDGAR CO.: 3 mi. N. of Chrisman, Ozment & DeFilipps 2267 (SIU). FRANKLIN CO.: 3 mi. N. of Benton, Evers 23766 (ILLS). FULTON CO.: Canton, Wolf s.n. (F).

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GRUNDY CO.: S. of Morris, Evers 24631 (ILLS). HENDERSON CO.: Oquawka, Patterson s.n. (F). HENRY CO.: Geneseo, Dobbs s.n. (ILLS). JACKSON CO.: Fountain Bluff, S. of Gorham, Evers 26430 (ILLS). JASPER CO.: W. of Advance, Ozment & DeFilipps 1736A (SIU). JO DAVIESS CO.: 4 mi. N. of Galena, Evers 30027 (ILLS). KANE CO.: N. of Elgin, Steyermark 68356 (F). KANKAKEE CO.: SE. of St. Anne, Fuller 8934 (ISM). KNOX CO.: 1 mi. S. of Maquon, Evers 24214 (ILLS). LAKE CO.: Wauconda, Evers 4556 (ILLS). LIVINGSTON CO.: 3 mi. W. of Rowe, Fuller 8537 (ISM). LEE CO.: 2 mi. E. of Kingdom, Keithley 420 (ISM). LOGAN CO.: Near Lincoln, Fuller 8767 (ILLS). MC DONOUGH CO.: W. of Macomb, Myers 524 (ISM). MC HENRY CO.: Ringwood, Vasey s.n. (ILL). MACON CO.: S. of Boody, Evers 49849 (ILLS). MARION CO.: SW. of Kinmundy, Evers 23786 (ILLS). MENARD CO.: S. of Oakford, Rexroat 4839 (ISM). MERCER CO.: 9 mi. N. of New Boston, Evers 24311 (ILLS). MORGAN CO.: 8 mi. SW. of Arenzville, Rexroat 2737 (ISM). OGLE CO.: Killbuck Creek, Fell 53694 (ISM). PIATT CO.: E. of Lodge, Evers 39366 (ILLS). SCOTT CO.: Near Oxville, Rexroat 3738 (ISM). ST. CLAIR CO.: Cahokia, collector unknown (MO). STARK CO.: Near Wady Petra, Chase 256 (ILL). TAZEWELL CO.: Spring Lake, Chase 13353 (ILL). VERMILION CO.: E. of Muncie, Evers 38610 (ILLS). WABASH CO.: Near Patton, Schneck s.n. (ILL). WILL CO.: Romeo, Steyermark 65846 (F). WILLIAMSON CO.: Devil's Kitchen Lake, Ellis & DeFilipps 3 (SIU). WINNEBAGO CO.: Rockford, Fuller & Haime 1912H (ISM). WOODFORD CO.: S. of Spring Bay, Chase 9692 (F).

3. Juncus interior Wieg. in Bull. Torrey Club 27: 516.  
1900. (Map 3)

Representative Specimens: ADAMS CO.: S. of Lima, Evers 38377 (ILLS). BOND CO.: SW. of Mulberry Grove, Evers 23882 (ILLS). BROWN CO.: E. of Siloam Springs State Park, Evers 35216 (ILLS). CALHOUN CO.: Brussels, Muller s.n. (ILLS). CASS CO.: Rexroat 5602 (ISM). CHAMPAIGN CO.: 2 mi. E. of Fisher, Evers 39414 (ILLS). CHRISTIAN CO.: Pana, Thompson s.n. (ILLS). CLARK CO.: N. of Marshall, Evers 64673 (ILLS). CLAY CO.: Larkingsburg, Evers 37194 (ILLS). CLINTON CO.: N. of Carlyle, Evers 18017 (ILLS). COLES CO.: SW. of Mattoon, Evers 38166 (ILLS). COOK CO.: Skokie Marsh, Glencoe, Sherff s.n. (F). CRAWFORD CO.: Robinson, Tehon s.n. (ILLS). CUMBERLAND CO.: N. of Neoga, Evers 38216 (ILLS). DE WITT CO.: NE. of Kenney, Evers 60100 (ILLS). DOUGLAS CO.: N. of Galton, Evers 34409 (ILLS). DU PAGE CO.: W. of Wheaton, Moffatt 769 (ILL). FAYETTE CO.: N. of Farina, Evers 34120 (ILLS). FORD CO.: N. of Sibley, Evers 33432 (ILLS). FRANKLIN CO.: S. of Benton, Evers 65231 (ILLS). FULTON CO.: N. of Anderson Lake, Rexroat 4919 (ISM). GALLATIN CO.: Ridgway, Boewe s.n. (ILLS). GREENE CO.: 5 mi. N. of Eldred, Evers 33274 (ILLS). HAMILTON CO.: S. of Dahlgren, Evers 37359 (ILLS). HANCOCK CO.: E. of Warsaw, Evers 38264 (ILLS). HARDIN CO.: N. of Elizabethtown, Evers 30378 (ILLS). HENDERSON CO.: Oquawka, Patterson s.n. (F). HENRY CO.:



3-4 mi. N. of Annawan, Dobbs s.n. (F). IROQUOIS CO.: 2 mi. E. of Watseka, Evers 71127 (ILLS). JACKSON CO.: Finney, Mohlenbrock 5306 (SIU). JASPER CO.: Newton, Stout s.n. (F). JEFFERSON CO.: SE. of Opdyke, Evers 37326 (ILLS). JERSEY CO.: W. of Chautauqua, Evers 25044 (ILLS). JOHNSON CO.: Drappers Bluff, Bailey & Swayne 2466 (SIU). KANKAKEE CO.: Kankakee, Hill s.n. (F). KNOX CO.: Near Williamsfield, Chase 1859 (ILL). LA SALLE CO.: Starved Rock State Park, Ries & Werner s.n. (ILLS). LAWRENCE CO.: 2 mi. E. of Lawrenceville, Sivert s.n. (ILL). LEE CO.: Green River Area, Hawkins & Anderson s.n. (ILLS). LIVINGSTON CO.: Dwight, Evers 37935 (ILLS). LOGAN CO.: C. & D. Heitmann 874 (ISM). MC DONOUGH CO.: SE. of Fandon, Evers 43822 (ILLS). MC HENRY CO.: NE. of Harvard, Evers 61365 (ILLS). MACON CO.: Elm Ridge, Clokey 2431 (F). MACOUPIN CO.: E. of Carlinville, Evers 3839 (ILLS). MADISON CO.: Godfrey, Winterringer 17048 (ISM). MARION CO.: SW. of Kinmundy, Evers 37269 (ILLS). MASON CO.: W. of Saidora, Rexroat 4925 (ISM). MENARD CO.: Athens, Hall s.n. (F). MERCER CO.: N. of Keithsburg, Evers 24279 (ILLS). MONROE CO.: SE. of Waterloo, Evers 34002 (ILLS). MONTGOMERY CO.: NE. of Nokomis, Evers 65898 (ILLS). MOULTRIE CO.: NW. of Sullivan, Evers 12862 (ILLS). OGLE CO.: N. of Davis Junction, Fell 53495 (ISM). PEORIA CO.: Keller, Chase 13469 (SIU). PERRY CO.: Tamaroa, Stout s.n. (F). PIATT CO.: 2 mi. W. of Monticello, Evers 53908 (ILLS). PIKE CO.: Near Barry, Campbell & Alexopoulos s.n. (ILLS). PULASKI CO.: S. of Ullin, Evers 33152 (ILLS). PUTNAM CO.: NW. of Standard, Evers 30642 (ILLS). RANDOLPH CO.: N. of Evansville, Ahles 6134 (ILL). RICHLAND CO.: Decker Township, Ridgway 300 (F). ROCK ISLAND CO.: Near Silvis, Fell & Fell F48-154 (ILL). ST. CLAIR CO.: NW. of Marissa, Boewe s.n. (ILLS). SALINE CO.: Old Stone Face, Sands 552 (SIU). SANGAMON CO.: Salisbury, Fuller 7943 (ISM). SCHUYLER CO.: 4 mi. S. of Frederick, Evers 53696 (ILLS). SCOTT CO.: N. of Exeter, Rexroat 3807 (ISM). SHELBY CO.: Sigel, Evers 34066 (ILLS). STARK CO.: Near Wady Petra, Chase 91 (F). UNION CO.: SE. of Balcom, Evers 3125 (ILLS). VERMILION CO.: Kickapoo State Park, Bell & Bray 28 (ILL). WABASH CO.: Mt. Carmel, Schneck s.n. (ILL). WARREN CO.: W. of Swan Creek, Evers 11798 (ILLS). WASHINGTON CO.: E. of Venedy, Evers 17905 (ILLS). WAYNE CO.: S. of Wayne City, Evers 26190 (ILLS). WHITE CO.: N. of Brownsville, Ahles 4671 (ILL). WHITESIDE CO.: 2 mi. W. of Erie, Fell & Fell 47215 (ILL). WILLIAMSON CO.: S. of Cambria, Evers 37435 (ILLS). WINNEBAGO CO.: Near South Beloit, Fuller 13773 (F).

4. Juncus tenuis Willd. Sp. Pl. 2: 214. 1799. (Map 4)

Representative Specimens: ADAMS CO.: Quincy, Brinker 1201 (ISM). ALEXANDER CO.: Thebes, Cranwill s.n. (ILL). BOND CO.: N. of Tamalco, Evers 39301 (ILLS). BOONE CO.: NW. of Belvidere, Fell 54655 (ISM). BROWN CO.: 3 mi. W. of Ripley, Chase 12774 (ILL). BUREAU CO.: E. of Tiskilwa, Evers 39577 (ILLS). CALHOUN CO.: S. of Hamburg, Evers 49972 (ILLS). CARROLL CO.: Mississippi Palisades



State Park, Evers 29900 (ILLS). CASS CO.: N. of Virginia, Rexroat 3769 (ISM). CHAMPAIGN CO.: Near Urbana, Jones 13652 (ILL). CHRISTIAN CO.: Taylorville, Jones 22173 (ILL). CLARK CO.: Lincoln Trail State Park, Ozment & DeFilipps 1449 (SIU). CLAY CO.: N. of Louisville, Evers 41377 (ILLS). CLINTON CO.: N. of Carlyle, Evers 18020 (ILLS). COLES CO.: SW. of Mattoon, Evers 38186 (ILLS). COOK CO.: Thornton, Lansing 1373 (F). CRAWFORD CO.: S. of Heathsville, Evers 46799 (ILLS). CUMBERLAND CO.: Hazel Dell Area, Spooner s.n. (ILLS). DE KALB CO.: N. of Fairdale, Fell 53453 (ISM). DE WITT CO.: NW. of Kenney, Evers 46930 (ILLS). DOUGLAS CO.: SW. of Bourbon, Evers 38119 (ILLS). DU PAGE CO.: Wheaton, Fuller 1651 (ISM). EDGAR CO.: SE. of Kansas, Evers 34421 (ILLS). EDWARDS CO.: NE. of Grayville, Evers 44866 (ILLS). EFFINGHAM CO.: SW. of Mason, Evers 18565 (ILLS). FAYETTE CO.: N. of Laclède, Evers 43030 (ILLS). FRANKLIN CO.: N. of Zeigler, Evers 44756 (ILLS). FULTON CO.: NE. of Banner, Evers 17020 (ILLS). GALLATIN CO.: Pounds Hollow Lake, Evers 30315 (ILLS). GREENE CO.: W. of Barrow, Evers 11947 (ILLS). GRUNDY CO.: S. of Mazon, Evers 47365 (ILLS). HAMILTON CO.: S. of Dale, Winterringer 11123 (ISM). HANCOCK CO.: Carthage, Kirchherr 100 (ISM). HARDIN CO.: Elizabethtown, Evers 23538 (ILLS). HENDERSON CO.: Oquawka, Patterson s.n. (F). HENRY CO.: Geneseo, Dobbs s.n. (ILLS). IROQUOIS CO.: E. of Milford, Ahles 3239 (ILL). JACKSON CO.: Giant City, Mohlenbrock 977 (ISM). JASPER CO.: SE. of Newton, Evers 11102 (ILLS). JEFFERSON CO.: E. of Opdyke, Evers 34156 (ILLS). JERSEY CO.: Near Otterville, Winterringer 15292 (ISM). JO DAVIESS CO.: S. of Rice, Evers 25283 (ILLS). JOHNSON CO.: New Burnside, Boewe s.n. (ILLS). KANE CO.: SE. of Kaneville, Evers 47403 (ILLS). KANKAKEE CO.: E. of St. Anne, Graham 9335 (ISM). KENDALL CO.: SE. of Plattville, Evers 37902 (ILLS). KNOX CO.: E. of Dahinda, Evers 39864 (ILLS). LAKE CO.: Beach, Graham 9391 (ILL). LA SALLE CO.: Starved Rock State Park, Werner s.n. (ILLS). LAWRENCE CO.: Birds, Boewe s.n. (ILLS). LEE CO.: Amboy, Long 424 (ILL). LIVINGSTON CO.: 3 mi. W. of Rowe, Fuller 8537 (ISM). LOGAN CO.: SW. of Lake Fork, Evers 46933 (ILLS). MC DONOUGH CO.: Macomb, Myers 309 (ISM). MC HENRY CO.: Algonquin, Nason s.n. (ILL). MC LEAN CO.: S. of LeRoy, Evers 50879 (ILLS). MAÇON CO.: Elm Ridge, Clokey 2430 (ILL). MACOUPIN CO.: 2 mi. NE. of Shipman, Evers 38804 (ILLS). MADISON CO.: Godfrey, Winterringer 16639 (ISM). MARTON CO.: Salem, Bebb s.n. (F). MARSHALL CO.: Henry City Park, Ozment & DeFilipps 1103A (SIU). MASON CO.: N. of Topeka, Ahles 4121 (ILL). MASSAC CO.: E. of Joppa, Evers 49768 (ILLS). MENARD CO.: Rexroat, 3753 (ISM). MERCER CO.: W. of Eliza, Evers 39721 (ILLS). MONROE CO.: 1 mi. S. of Fults, Ozment s.n. (SIU). MONTGOMERY CO.: 2 mi. S. of Nokomis, Trojczak s.n. (ISM). MORGAN CO.: Near Alexander, Carter 15271 (ISM). MOULTRIE CO.: Wyman Park, Sullivan, Ozment & DeFilipps 2058 (SIU). OGLE CO.: E. of Oregon, Evers 37812 (ILLS). PEORIA CO.: NW. of Mossville, Chase 8949 (ISM). PERRY CO.: S. of Pyatts, Evers 18724 (ILLS). PIATT CO.: Near Monticello, Jones 17868 (ILL). PIKE CO.: Pittsfield, Boewe s.n. (ILLS). POPE CO.: N. of Herod, Ahles 2726 (ILL). PULASKI CO.: 1 mi. N. of America, Evers 11522 (ILLS).



PUTNAM CO.: 4 mi. E. of Henry, Ozment & DeFilippis 1181 (SIU).  
 RANDOLPH CO.: Near Modoc, Trojczak 216R (ISM). RICHLAND CO.: Ol-  
 ney, Ridgway 120 (F). ROCK ISLAND CO.: Port Byron, Fuller 13788  
 (ISM). ST. CLAIR CO.: Dutch Hollow, Neill 858 (ISM). SALINE CO.:  
 1 mi. SW. of Carrier Mills, Evers 2769 (ILLS). SANGAMON CO.:  
 Salisbury Township, Fuller 7943 (ILLS). SCHUYLER CO.: NE. of Lit-  
 tleton, Evers 18263 (ILLS). SCOTT CO.: 2 mi. N. of Manchester,  
Flynn 15159 (ISM). SHELBY CO.: Sigel, Evers 34069 (ILLS). STARK  
 CO.:  $1\frac{1}{2}$  mi. NW. of Wady Petra, Chase 64 (F). TAZEWELL CO.: N.  
 of East Peoria, Evers 39457 (ILLS). UNION CO.: E. of Larue, Evers  
23935 (ILLS). VERMILION CO.: SE. of Oakwood, Evers 38646 (ILLS).  
 WABASH CO.: Belmont, Boewe s.n. (ILLS). WARREN CO.: N. of Mon-  
 mouth, Ozment & DeFilippis 1060 (SIU). WASHINGTON CO.: Venedy,  
Evers 33949 (ILLS). WAYNE CO.: E. of Sims, Evers 44286 (ILLS).  
 WHITE CO.: Dogtown Hills, S. of Maunie, Evers 44876 (ILLS). WHITE-  
 SIDE CO.: E. of Fulton, Ozment & DeFilippis 547 (SIU). WILL CO.:  
 Romeo, Umbach s.n. (F). WILLIAMSON CO.: S. of Carterville, Evers  
18624 (ILLS). WINNEBAGO CO.: Rockford, Fell & Fell F48-360 (ILL).  
 WOODFORD CO.: S. of Spring Bay, Chase 9686 (ILL).

5. Juncus vaseyi Engelm. in Trans. Acad. St. Louis 2: 448. 1866.  
 (Map 5)

Representative Specimens: COOK CO.: Cleaver's Woods, Bebb  
942 (ILL). MC HENRY CO.: Near Ringwood, Vasey s.n. (MO). WINNEBA-  
 GO CO.: 2 mi. W. of South Beloit, Fell & Fell 47176 (ILL).

6. Juncus greenei Oakes & Tuckerm. in Tuckerm. in Am. Jour.  
 Sci. 45: 37. 1843. (Map 6)

Representative Specimens: COOK CO.: Washington Heights,  
Bebb 947 (F). IROQUOIS CO.:  $\frac{1}{2}$  mi. N. of Pittwood, Evers 19032  
 (ILLS). KANKAKEE CO.: Kankakee, Hill 80 (ILL). LAKE CO.: Illinois  
 Beach State Park, Brown 202 (ILL). LEE CO.: Green River Area, Bell-  
rose s.n. (ILLS). WILL CO.: 2 mi. SE. of Custer Park, Steyermark  
64854 (F). WINNEBAGO CO.: Near Shirland, Fell 53870 (ISM).

7. Juncus gerardi Loisel. in Jour. Bot. Desvaux 2: 284. 1809.  
 (Map 7)

Representative Specimen: COOK CO.: Chicago, 92nd. & Stony  
 Island, Glassman 3788 (CHI).

8. Juncus bufonius L. Sp. Pl. 328. 1753. var. bufonius (Map 8a)

Representative Specimens: CARROLL CO.: N. of Savanna, Ahles  
4336 (ILL). CHAMPAIGN CO.: Urbana, Ahles 6326 (ILL). COOK CO.:  
 Chicago, Vasey s.n. (F). DU PAGE CO.: W. of Wheaton, Moffatt 768  
 (ILL). HENDERSON CO.: Near Biggsville, Patterson s.n. (F). LAKE  
 CO.: E. of Beach, Gates 2782 (F). MC HENRY CO.: Ringwood, Vasey  
s.n. (ILL). WABASH CO.: Shearer s.n. (ILL). WASHINGTON CO.: Irv-  
 ington, French s.n. (SIU). WILL CO.: Drummond, Swink 46-A (SIU).



Juncus bufonius L. var. congestus Wahlb. Flora Gothoburgensis 38. 1820. (Map 8b)

Representative Specimen: COOK CO.: South Chicago, Hill 35. 1877 (ILL).

9. Juncus effusus L. Sp. Pl. 326. 1753 var. solutus Fern. & Wieg. in Rhodora 12: 90. 1910. (Map 9)

Representative Specimens: ALEXANDER CO.: SE. of Olive Branch, Evers 44486 (ILLS). CHRISTIAN CO.: Taylorville, Andrews s.n. (ILL). COOK CO.: Thornton, Fuller 1627 (ISM). EDWARDS CO.: Near Albion, Shearer s.n. (ILL). FRANKLIN CO.: Near Christopher, Jones 12165 (ILL). HAMILTON CO.: 2 mi. E. of Piopolis, Evers 5043 (ILLS). HENRY CO.: Near Ballou's Green River Bridge, Dobbs s.n. (ILLS). JACKSON CO.: Makanda, Seymour 29559 (ILL). JEFFERSON CO.: S. of Centralia, Campbell & Alexopoulos s.n. (ILLS). JOHNSON CO.: Near Vienna, Fuller 14696 (ISM). LA SALLE CO.: Starved Rock State Park, Lansing 3837 (F). LAWRENCE CO.: 1 mi. SE. of Lawrenceville, Sivert s.n. (ILL). LEE CO.: Amboy, Long 762 (ILL). MARION CO.: SW. of Alma, Ahles 5377 (ILL). MASSAC CO.: NW. of Boaz, Evers 30380 (ILLS). MONROE CO.: N. of Renault, Bailey & Swayne 2606 (SIU). PERRY CO.: NW. of Pinckneyville, Evers 17940 (ILLS). POPE CO.: Lake Glendale, Bailey & Swayne 1562 (SIU). PULASKI CO.: N. of Olmstead, Ahles 6200 (ILL). ROCK ISLAND CO.: Near Silvis, Chase 16999 (ILL). SALINE CO.: 1 mi. SW. of Carrier Mills, Evers 2808 (ILLS). UNION CO.: Pine Hills, Hardy 19 (SIU). WASHINGTON CO.: Irvington, French s.n. (SIU). WHITE CO.: E. of Norris City, Evers 23500 (ILLS). WILLIAMSON CO.: SW. of Carterville, Evers 30501 (ILLS). WINNEBAGO CO.: 2 mi. W. of South Beloit, Fell & Fell F47-160 (ISM).

10. Juncus balticus Willd. in Mag. Ges. Naturf. Freunde Berlin 3: 298. 1809. var. littoralis Engelm. in Trans. Acad. St. Louis 2: 442. 1866. (Map 10)

Representative Specimens: COOK CO.: Chicago, Vasey s.n. (ILL). JO DAVIESS CO.: E. of Woodbine, Ahles 4415 (ILLS). LAKE CO.: Waukegan, Fuller 7768 (ISM). MC HENRY CO.: Algonquin, Nason s.n. (ILL).

11. Juncus biflorus Ell. Bot. S. C. and Ga. 1:407. 1817. f. biflorus (Map 11a)

Representative Specimens: BOND CO.: 1 mi. N. of Woburn, Evers 39318 (ILLS). CLAY CO.: Greendale, Evers 50750 (ILLS). CLINTON CO.: S. of Posey, Evers 31326 (ILLS). CRAWFORD CO.: W. of Oblong, Ahles 4845 (ILL). CUMBERLAND CO.: 1 mi. S. of Neoga, Winterringer 694 (ILL). EDWARDS CO.: 2 mi. W. of Samsville, Evers 70577 (ILLS). EFFINGHAM CO.: NE. of Mason, Evers 34082 (ILLS).



FAYETTE CO.: E. of Vandalia, O'Dell 543 (ILL). FRANKLIN CO.: S. of Benton, Evers 18615 (ILLS). GALLATIN CO.: Rt. 45 at Omaha Rd., Ozment & DeFilipps 1411 (SIU). HAMILTON CO.: S. of Dale, Winterringer 11122 (ISM). HARDIN CO.: Near Lamb, Buser 2856 (ILLS). JACKSON CO.: Makanda, Cranwill s.n. (ILL). JASPER CO.: Newton, Pepoon & Barrett s.n. (ILLS). JEFFERSON CO.: NW. of Belle Rive, Evers 18589 (ILLS). JOHNSON CO.: W. of Goreville, Evers 23735 (ILLS). KANKAKEE CO.: 3 mi. NW. of Bonfield, Jones 15881 (ILL). LAWRENCE CO.: 6 mi. S. of Summer, Sivert s.n. (ILL). MARION CO.: Salem, Ahles 2885 (ILL). PERRY CO.: S. of Sunfield, Evers 30565 (ILLS). POPE CO.: Belle Smith Springs, Voigt 731 (SIU). PULASKI CO.: W. of Pulaski, Mohlenbrock & Voigt 5552 (SIU). RICHLAND CO.: 4 mi. SW. of Olney, Scherer & Shaw 396 (ISM). ST. CLAIR CO.: Brendel s.n. (ILL). SALINE CO.: W. of Harrisburg, Evers 17523 (ILLS). SHELBY CO.: Sigel, Evers 34074 (SIU). UNION CO.: French 2975 (SIU). WABASH CO.: S. of Keensburg, Ahles 4656 (ILL). WASHINGTON CO.: Irvington, French s.n. (SIU). WAYNE CO.: E. of Sims, Evers 65481 (ILLS). WHITE CO.: S. of Norris City, Evers 17785 (ILLS). WILLIAMSON CO.: Crab Orchard Lake, Sands & Garrison 338 (SIU).

Juncus biflorus Ell. f. adimus Fern. & Grisc. in Rhodora 37: 157. 1935. (Map 11b)

Representative Specimens: ALEXANDER CO.: McClure, Cranwill s.n. (ILL). CLARK CO.: 3 mi. N. of Marshall, Winterringer 14429 (ISM). WABASH CO.: About Mt. Carmel, Schneck s.n. (ILL).

12. Juncus marginatus Rostk. Monog. Junc. 38, pl. 2, f. 3. 1801. (Map 12)

Representative Specimens: ADAMS CO.: Burton Cave, Evers, Jones, & Jones 1174 (ILL). CASS CO.: Beardstown, Benke 3919 (F). COOK CO.: Thornton, Fuller 1699 (ISM). FRANKLIN CO.: N. of Thompsonville, Evers 34193 (ILLS). GALLATIN CO.: S. of Kedron, Evers 26753 (ILLS). HANCOCK CO.: Augusta, Mead s.n. (F). IROQUOIS CO.: Near Beaverville, Jones 18817 (ILL). JOHNSON CO.: E. of Vienna, Winterringer 8998 (ISM). KANKAKEE CO.: Near St. Anne, Jones 16054 (ISM). LAWRENCE CO.: E. of Billett, Evers 29603 (ILLS). LEE CO.: Amboy, Long 598 (ILL). MASON CO.: W. of Manito, Chase 5260 (ILL). MENARD CO.: Athens, Hall s.n. (F). MORGAN CO.: N. of Jacksonville, Rexroat 4058 (ISM). RICHLAND CO.: 3½ mi. N. of Olney, Scherer 410 (ILL). SALINE CO.: SE. of Rudement, Evers 70271 (ILLS). SCHUYLER CO.: Rexroat 5216 (ISM). WAYNE CO.: Ellery, Boewe s.n. (ILLS). WHITE CO.: Norris City, Ahles 4676 (ILL). WILL CO.: 2 mi. SE. of Custer Park, Steyermark 64825 (F). WILLIAMSON CO.: Devil's Kitchen Lake, Stookey & Fore 517 (SIU). WINNEBAGO CO.: Campbell Bog, Fell 51695 (ISM).

13. Juncus nodosus L. Sp. Pl. ed. 2: 466. 1762. (Map 13)

Representative Specimens: COOK CO.: Chicago, Lansing 688 DU PAGE CO.: Bensenville, Bennett s.n. (ILLS). KANE CO.: N. of



Elgin, Steyermark 68353 (F). KANKAKEE CO.: Rock Creek, Hill 317.-  
 1873 (ILL). LAKE CO.: E. of Zion, Brown 167 (ILL). LEE CO.: Am-  
 boy, Long 798 (ILL). MC HENRY CO.: Ringwood, Vasey s.n. (ILL).  
 OGLE CO.: Byron, Blount 196 (ISM). PEORIA CO.: Peoria, Brendel  
 s.n. (ILL). WASHINGTON CO.: Irvington, French s.n. (SIU). WILL  
 CO.: Joliet, Skeels 420 (F). WINNEBAGO CO.: Rockford, Fuller &  
 Haime 2131H (ISM). WOODFORD CO.: Adams Mill, McDonald s.n. (ILL).

14. Juncus torreyi Coville, in Bull. Torrey Club 22: 303.  
 1895. (Map 14).

Representative Specimens: ADAMS CO.: 1 mi. N. of Ursa,  
 Brinker 3065 (ILL). ALEXANDER CO.: W. of Cairo, Winterringer 3122  
 (ISM). BOONE CO.: Near Caledonia, Fell 54863 (ISM). BROWN CO.: N.  
 of locks, Rexroat 2951 (ISM). CARROLL CO.: Mississippi Palisades,  
 Wunderlin 441 (WIU). CASS CO.: W. of Ashland, Chase 11292 (ILL).  
 CHAMPAIGN CO.: Champaign, Seymour & Waite 29702 (ILL). CHRISTIAN  
 CO.: Taylorville, Andrews s.n. (ILL). COLES CO.: Humboldt, Amm-  
 ann s.n. (ILLS). COOK CO.: Morton Grove, Glassman 3735 (CHI).  
 CRAWFORD CO.: 1 mi. S. of York, Ozment & DeFilipps 1250 (SIU).  
 CUMBERLAND CO.: N. of Neoga, Winterringer 3425 (ISM). DE KALB  
 CO.: Near Kirkland, Fell 53688 (ISM). DE WITT CO.: SW. of Ken-  
 ney, Evers 34517 (ILLS). DOUGLAS CO.: Arcola, Mohr s.n. (ILLS).  
 DU PAGE CO.: NE. of Wheaton, Moffatt 762 (ILL). EDGAR CO.: N. of  
 Chrisman, Winterringer 14156 (ISM). EDWARDS CO.: 5 mi. S. of Bro-  
 wns, Evers 64869 (ILLS). EFFINGHAM CO.: N. of Effingham, Evers  
 20696 (ILLS). FAYETTE CO.: E. of Vandalia, O'Dell 571 (ILL).  
 FORD CO.: Roberts, Ahles 3117 (ILL). FRANKLIN CO.: Benton Lake,  
 Sands s.n. (SIU). FULTON CO.: 2 mi. S. of Vermont, Evers 30935  
 (ILLS). GALLATIN CO.: S. of Omaha, Evers 17769 (ILLS). GRUNDY  
 CO.: SW. of Gardner, Evers 21683 (ILLS). HANCOCK CO.: E. of Ni-  
 ota, Evers 54921 (ILLS). HENDERSON CO.: Near Oquawka, Patterson  
 s.n. (F). HENRY CO.: 1 mi. E. of Atkinson, Dobbs s.n. (ILLS).  
 IROQUOIS CO.: Sand region, Tehon s.n. (ILL). JACKSON CO.: Bos-  
 kydell, Cranwill s.n. (ILL). JEFFERSON CO.: E. of Opdyke, Evers  
 34157 (ILLS). JO DAVIESS CO.: 4 mi. S. of Galena, Ozment & De-  
 Filipps 463 (SIU). KANE CO.: NW. of Elgin, Benke 3667 (F). KAN-  
 KAKEE CO.: E. of St. Anne, Graham 9332 (ISM). KNOX CO.: Altona,  
 Winterringer 18117 (ISM). LAKE CO.: Beach, Fuller 9390 (ILL).  
 LA SALLE CO.: Starved Rock State Park, Werner s.n. (ILLS). LAW-  
 RENCE CO.: E. of Billett, Evers 34714 (ILLS). LEE CO.: Amboy,  
 Long 201 (ILL). LIVINGSTON CO.: NW. of Strawn, Evers 13551 (ILLS).  
 LOGAN CO.: Near Lincoln, Fuller 7182 (ILL). MC DONOUGH CO.: N.  
 of Bushnell, Myers 1166 (ISM). MC HENRY CO.: Algonquin, Nason  
 s.n. (ILL). MC LEAN CO.: Fuller 180 (ISM). MACON CO.: NW. of  
 Decatur, Evers 38699 (ILLS). MACOUPIN CO.: Carlinville, Robert-  
 son s.n. (ILLS). MARION CO.: NE. of Alma, Evers 70451 (ILLS).  
 MARSHALL CO.: W. of Varna, Evers 7097 (ILLS). MASON CO.: E. of  
 Mason City, Evers 5881 (ILLS). MENARD CO.: S. of Oakford, Rex-  
 roat 5164 (ISM). MONTGOMERY CO.: Litchfield, Jones 2206 (ILL).  
 MORGAN CO.: N. of Jacksonville, Rexroat 4067 (ISM). PEORIA CO.:  
 Peoria, Brendel s.n. (ILL). PERRY CO.: S. of Sunfield, Evers  
 30560 (ILLS). PIATT CO.: NW. of Lodge, Evers 46885 (ILLS).



PUTNAM CO.: S. of Swan Lake, Ozment & DeFilippis 1145 (SIU). RANDOLPH CO.: 5 mi. S. of Sparta, Winterringer 6665 (ISM). RICHLAND CO.: 4 mi. N. of Olney, Scherer & Shaw 692 (ISM). ROCK ISLAND CO.: Near Port Byron, Fuller 13787 (ILL). ST. CLAIR CO.: Cahokia, Eggert 13926 (F). SALINE CO.: 3 mi. SW. of Eldorado, Evers 51586 (ILLS). SANGAMON CO.: E. of Buffalo Hart, Evers 12037 (ILLS). SCHUYLER CO.: S. of Frederick, Evers 5910 (ILLS). SCOTT CO.: Merritt, Rexroat 3797 (ISM). SHELBY CO.: 2 mi. E. of Tower Hill, Boewe s.n. (ILLS). STARK CO.: SE. of Wyoming, Evers 18111 (ISM). TAZEWELL CO.: E. of Mackinaw, Evers 18218 (ILLS). VERMILION CO.: Muncie, Bell 231 (ILL). WABASH CO.: Mt. Carmel, Shearer s.n. (ILL). WILL CO.: 1 mi. E. of Braidwood, Yokoyama s.n. (CHI). WINNEBAGO CO.: Kent Creek, Fell 51250 (ISM). WOODFORD: S. of Minonk, Evers 54610 (ILLS).

15. Juncus brachycarpus Engelm. in Trans. Acad. St. Louis 2: 467. 1868. (Map 15)

Representative Specimens: ALEXANDER CO.: Near Diswood, Winterringer 10333 (ISM). BOND CO.: E. of Greenville, Winterringer 15950 (ISM). CHRISTIAN CO.: Taylorville, Andrews s.n. (ILL). CLAY CO.: S. of Flora, Winterringer 8206 (ISM). CLINTON CO.: S. of Posey, Evers 31328 (ILLS). COOK CO.: Thornton, Fuller 2295 (ISM). CRAWFORD CO.: Between Oblong and Stoy, Ahles 4904 (ILL). CUMBERLAND CO.: S. of Greenup, Winterringer 14290 (ISM). EDWARDS CO.: 2 mi. W. of Samsville, Evers 70576 (ILLS). EFFINGHAM CO.: NE. of Mason, Evers 34096 (ILLS). FAYETTE CO.: N. of Laclede, Evers 43037 (ILLS). FRANKLIN CO.: N. of Thompsonville, Evers 34191 (ILLS). HAMILTON CO.: S. of Dale, Winterringer 11126 (ISM). HARDIN CO.: Near Rosiclare, Winterringer 2425 (ISM). JACKSON CO.: Giant City, Mohlenbrock 763 (SIU). JASPER CO.: SE. of Newton, Evers 11115 (ILLS). JEFFERSON CO.: SE. of Opdyke, Evers 37307 (ILLS). KANKAKEE CO.: SE. of St. Anne, Fuller 8937 (ISM). LAWRENCE CO.: E. of Billett, Evers 29612 (ILLS). MACON CO.: 1 mi. N. of Decatur, Shouse s.n. (ILL). MACOUPIN CO.: Carlinville, Robertson s.n. (ILLS). MADISON CO.: Near Canteen Lake, Eggert s.n. (MO). MARION CO.: Salem, Ahles 2886 (ILL). MC HENRY CO.: Ringwood, Vasey s.n. (ILL). MENARD CO.: Near Athens, Hall s.n. (F). MONROE CO.: 10 mi. SE. of Waterloo, Winterringer 6666 (ISM). MONTGOMERY CO.: S. of Litchfield, Winterringer 3897 (ISM). PEORIA CO.: Peoria, Brendel s.n. (ILL). PERRY CO.: 3 mi. N. of Tamaroa, Chase 6601 (ILL). PIATT CO.: 2 mi. W. of Monticello, Evers 53910 (ILLS). POPE CO.: Herod, Schopf s.n. (ILLS). PULASKI CO.: 4 mi. S. of Ullin, Winterringer 11128 (ISM). RANDOLPH CO.: Red Bud, Pammel s.n. (MO). RICHMOND CO.: 3 mi. N. of Olney, Scherer 483 (ILL). ST. CLAIR CO.: Brendel s.n. (ILL). SALINE CO.: Near Texas City, Buser 6251 (ILLS). SANGAMON CO.: Between Riverton & Illiopolis, Winterringer 17220 (ISM). UNION CO.: Panther's Den, MacMahon 468 (SIU). WABASH CO.: Near Mt. Carmel, Schneck s.n. (ILL). WASHINGTON CO.: Irvington, French s.n. (SIU). WHITE CO.: E. of Norris City, Evers 23502 (ILLS). WILL CO.: 1 mi. SW. of Braidwood, Evers 10486 (ILLS). WILLIAMSON CO.: S. of Cambria, Evers 37439 (ILLS).



16. Juncus scirpoides Lam. Encycl. Meth. Bot. 3: 267. 1789.  
var. scirpoides (Map 16)

Representative Specimens: CASS CO.: Beardstown, Benke 3920 (F). LAWRENCE CO.: E. of Billett, Evers 34707 (ILLS). MENARD CO.: S. of Oakford, Rexroat 5515 (ISM).

17. Juncus diffusissimus Buckl. in Proc. Acad. Phila. 14: 9.  
1862. (Map 17)

Representative Specimens: JACKSON CO.: Giant City, Mohl-  
enbrock 253 (SIU). JEFFERSON CO.: Mt. Vernon City Reservoir, Fore  
& Stookey 745 (SIU). LAWRENCE CO.: 1 mi. NE. of Sumner, Sivert  
s.n. (ILL). MASSAC CO.: W. of Midway, Evers 67062 (ILLS).

18. Juncus nodatus Cov. in Britt. & Brown, Illustr. Fl. N.  
Un. St., ed. 2, 1: 482. 1913. (Map 18)

Representative Specimens: BOND CO.: Near Greenville,  
Pepoon & Barrett 5167 (ILLS). CHRISTIAN CO.: Lake Pana, Trojczak  
s.n. (ISM). CLAY CO.: S. of Flora, Ahles 2672 (ILL). CUMBERLAND  
CO.: S. of Neoga, Evers 30850 (ILLS). FAYETTE CO.: Ramsey, Marty  
17073 (ISM). FRANKLIN CO.: Benton Lake, Fore & Stookey 658 (SIU).  
HANCOCK CO.: Augusta, Mead s.n. (MO). JACKSON CO.: Crab Orchard  
Lake, Abney & Dillard 113 (SIU). JEFFERSON CO.: N. of Mt. Vernon,  
Fore & Stookey 744 (SIU). LAWRENCE CO.: E. of Sumner, Sivert s.n.  
(ILL). MACOUPIN CO.: Carlinville, Robertson s.n. (ILLS). MARION  
CO.: Salem, Ahles 2887 (ILLS). MONTGOMERY CO.: SW. of Litchfield,  
Evers 12078 (ILLS). POPE CO.: Near Bell Smith Springs, Bailey &  
Swayne 3028 (SIU). ST. CLAIR CO.: Brendel s.n. (ILL). WASHINGTON  
CO.: Irvington, French s.n. (SIU). WAYNE CO.: Fairfield Reservoir,  
Fore & Stookey 727 (SIU). WHITE CO.: Norris City, Buser 2589  
(ILLS). WILLIAMSON CO.: Cambria, Bell s.n. (SIU).

19. Juncus acuminatus Michx. Fl. Bor. Am. 1: 192. 1803. (Map 19)

Representative Specimens: ALEXANDER CO.: Cache, Cranwill  
s.n. (ILL). BOND CO.: E. of Smithsboro, Evers 18053 (ILLS). CASS  
CO.: Bluff Springs, Rexroat 3785 (ISM). CHRISTIAN CO.: Taylor-  
ville, Andrews s.n. (ILL). COOK CO.: Berwyn, Hill 36.1908 (ILL).  
CRAWFORD CO.: 2 mi. S. of Heathsville, Evers 4089 (ILLS). CUMBER-  
LAND CO.: N. of Neoga, Evers 38221 (ILLS). EDWARDS CO.: 3 mi. N.  
of Albion, Fore & Stookey 716 (SIU). EFFINGHAM CO.: S. of Mont-  
rose, Evers 16448 (ILLS). FAYETTE CO.: 2 mi. N. of Hagerstown,  
Evers 23866 (ILLS). FRANKLIN CO.: Benton Lake, Sands s.n. (SIU).  
FULTON CO.: Wolf s.n. (F). HAMILTON CO.: S. of Dale, Evers 65461  
(ILLS). HANCOCK CO.: Augusta, Mead s.n. (MO). HARDIN CO.: NE. of  
Eichorn, Evers 34346 (ILLS). HENDERSON CO.: Oquawka, Patterson  
12 (F). HENRY CO.: 3-4 mi. N. of Annawan, Dobbs s.n. (ILLS).  
IROQUOIS CO.: Sand region, Tehon s.n. (ILLS). JACKSON CO.: Giant  
City, Voigt 1457 (SIU). JEFFERSON CO.: NE. of Mt. Vernon, Boewe  
s.n. (ILLS). JOHNSON CO.: Busby Hollow, Voigt s.n. (SIU). KAN-  
KAKEE CO.: Kankakee, Hill 51.1871 (ILL). LAWRENCE CO.: E. of



Billett, Evers 29611 (ILLS). LEE CO.: Amboy, Long 203 (ILL). MC-HENRY CO.: Ringwood, Vasey s.n. (F). MACOUPIN CO.: Carlinville, Andrews s.n. (ILL). MADISON CO.: H. Eggert s.n. (MO). MARION CO.: Bebb s.n. (F). MASON CO.: W. of Saidora, Rexroat 5492 (ILLS). MASSAC CO.: NE. of Metropolis, Winterringer 14919 (ISM). MENARD CO.: Athens, Hall 15 (F). MONROE CO.: S. of Burksville, Bollwinkel 253 (SIU). PEORIA CO.: Stewart s.n. (F). PERRY CO.: S. of Pyatts, Evers 18722 (ILLS). PIATT CO.: N. of Monticello, Ahles 6575 (ILL). PIKE CO.: NE. of Chambersburg, Evers 60233 (ILLS). POPE CO.: E. of Dixon Springs, Evers 23552 (ILLS). PULASKI CO.: N. of Pulaski, Evers 46486 (ILLS). RANDOLPH CO.: Coulterville Reservoir, Fore & Stookey 645 (SIU). RICHLAND CO.: Decker Township, Ridgway 241 (F). ROCK ISLAND CO.: Port Byron, Fuller 13789 (ISM). ST. CLAIR CO.: W. of Edgemont, Neill 845 (ISM). SALINE CO.: Near Eldorado, Buser 6716 (ILLS). STARK CO.: Near Wady Petra, Chase 1878 (ILL). TAZEWELL CO.: Pekin, Chase 10848 (ILL). UNION CO.: E. of Dongola, Pepoon & Mohr 307 (ILLS). WABASH CO.: Shearer farm, Shearer s.n. (ILL). WASHINGTON CO.: Venedy Station, Evers 33940 (ILLS). WHITE CO.: S. of Norris City, Evers 17782 (ILLS). WHITESIDE CO.: 1 mi. W. of Erie, Fuller 13681 (ISM). WILL CO.: 2 mi. SE. of Custer Park, Steyermark 64840 (ILL). WILLIAMSON CO.: Carterville, Bell s.n. (SIU). WINNEBAGO CO.:  $\frac{1}{2}$  mi. W. of Shirland, Fell & Fell F46401 (ISM).

20. Juncus canadensis J. Gay ex Laharpe, in Mem. Soc. Hist. Nat. Paris 4: 134. 1825. (Map 20)

Representative Specimens: CASS CO.: W. of Virginia, Rexroat 7362 (ISM). COOK CO.: Thornton, Fuller 1971 (F). HANCOCK CO.: Augusta, Mead s.n. (MO). HENRY CO.:  $\frac{1}{4}$  mi. S. of Snedaker's, Dobbs s.n. (ILLS). IROQUOIS CO.: NE. of Beaverville, Evers 35710 (ILLS). KANKAKEE CO.: Kankakee, Hill 91.1973 (ILL). LAKE CO.: Zion, Evers 40109 (ILLS). LEE CO.: Amboy, Long 631 (ILL). MC HENRY CO.: Ringwood, Vasey s.n. (F). MENARD CO.: Athens, Hall s.n. (F). OGLE CO.: Pine Rock Bog, Spongberg 63/158 (ISM). WABASH CO.: About Mt. Carmel, Schneck s.n. (ILL). WILL CO.: SW. of Wilmington, Pepoon & Barrett 5384 (ILLS). WINNEBAGO CO.: NW. of Rockton, Evers 40226 (ILLS).

21. Juncus brachycephalus (Engelm.) Buch. in Bot. Jahrb. 12: 268. 1890. (Map 21)

Representative Specimens: COOK CO.: Englewood, Hill 114 (ILL). KANE CO.: Elgin, Benke 3668 (F). KANKAKEE CO.: Kankakee, Hill 107 (ILL). LAKE CO.: Waukegan, Benke 2933 (F). MC HENRY CO.: N. of Hebron, Evers 40165 (ILLS). PEORIA CO.: Peoria, Brendel s.n. (ILL). TAZEWELL CO.: 3 mi. N. of East Peoria, Evers 21739 (ILLS). WOODFORD CO.: Adams Mills, McDonald s.n. (F).

22. Juncus alpinus Vill. Histoire des Plantes de Dauphine 2: 233. 1787. var. rariflorus Hartm., Skand. Fl., ed. 7, 240. 1858. (Map 22a)



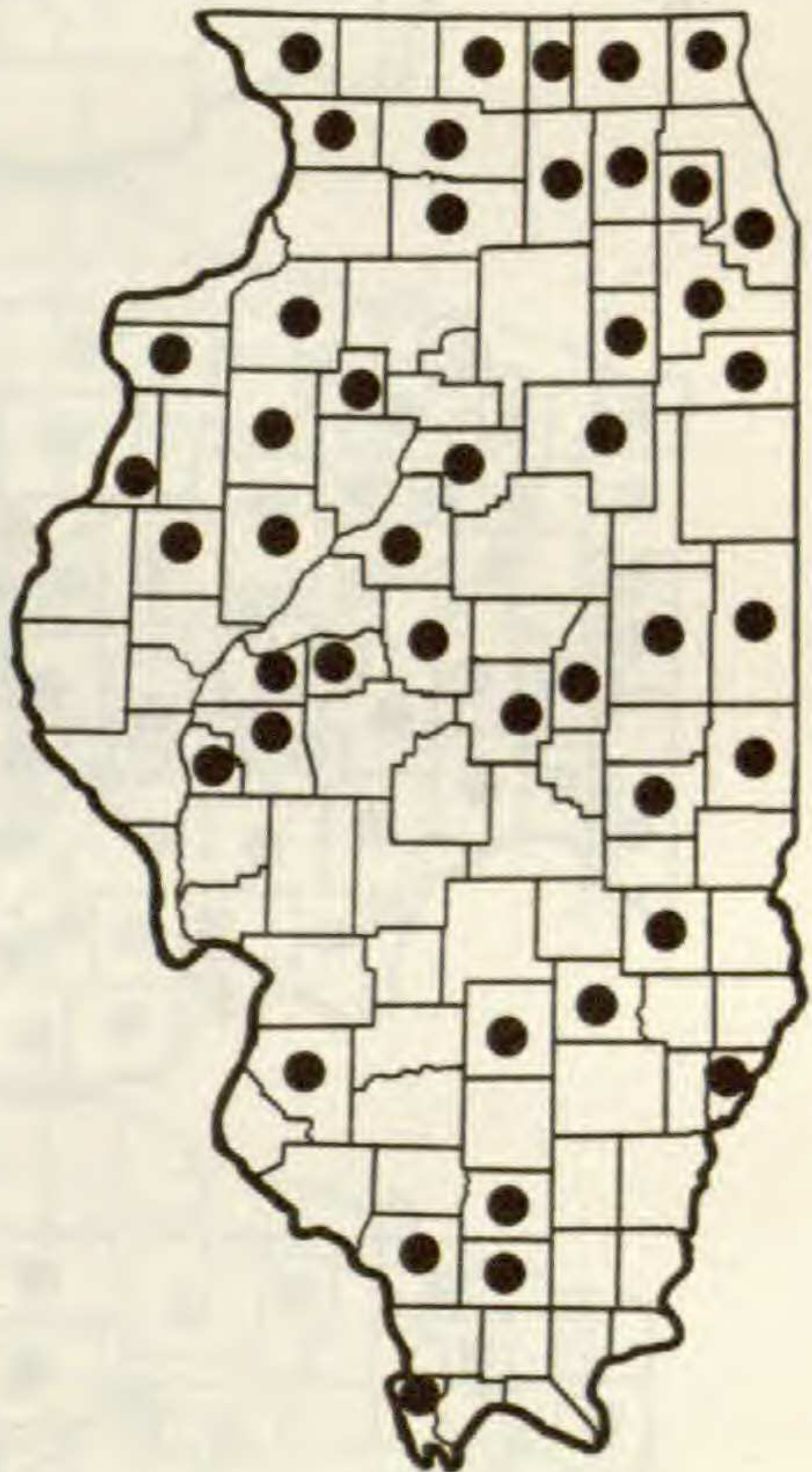
Representative Specimens: COOK CO.: South Chicago, Hill 35.1875 (ILL). KANE CO.: Elgin, Vasey s.n. (F). LAKE CO.: Waukegan, Gates 2923 (ILL). MC HENRY CO.: Ringwood, Vasey s.n. (F 467500).

Juncus alpinus Vill. var. fuscescens Fern. in Rhodora 10: 48. 1908. (Map 22b)

Representative Specimens: COOK CO.: Chicago, Lansing 257 (F). LAKE CO.: Waukegan, Gates 2859 (F).

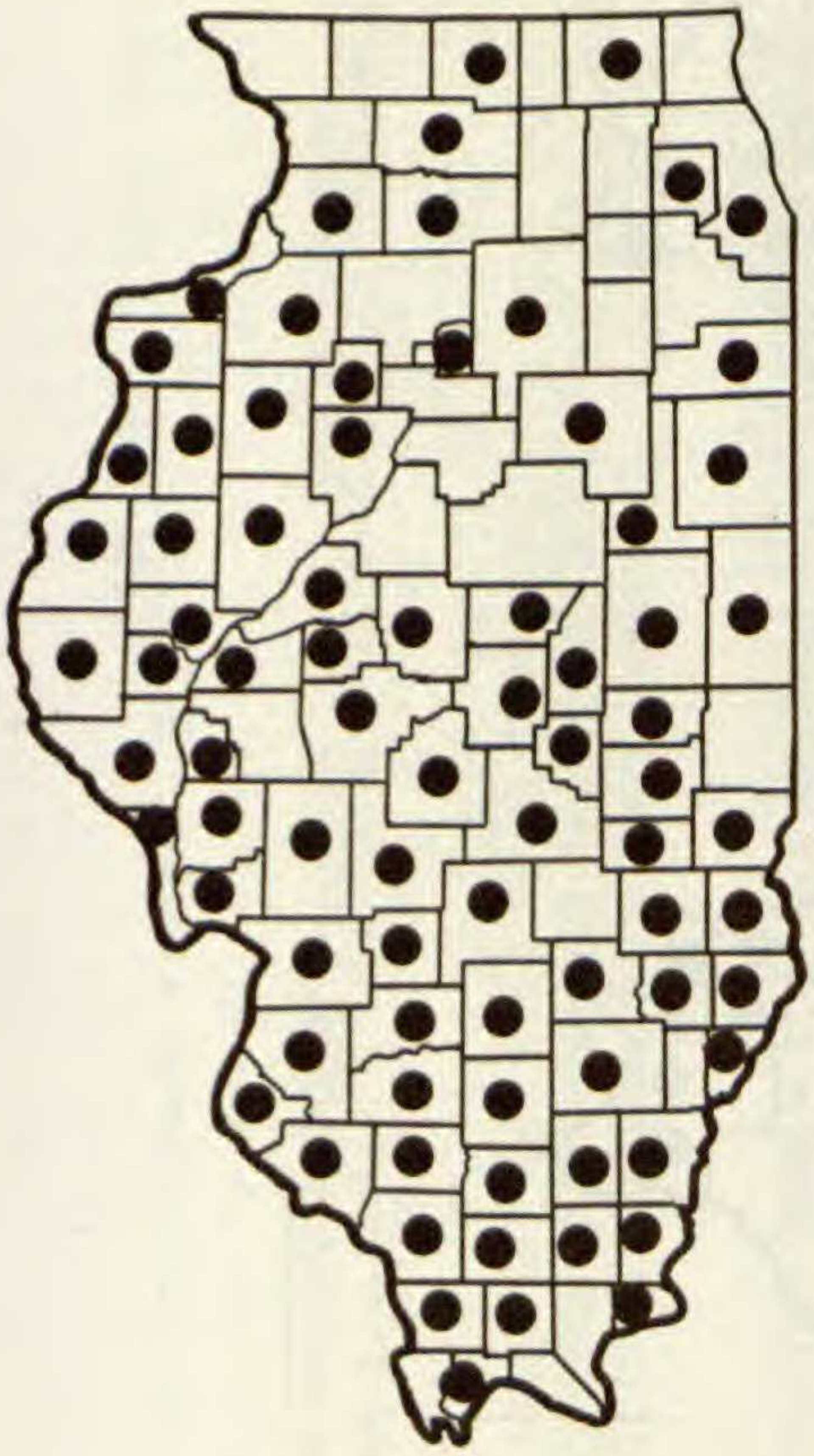


Map 1  
Juncus secundus Beauv.

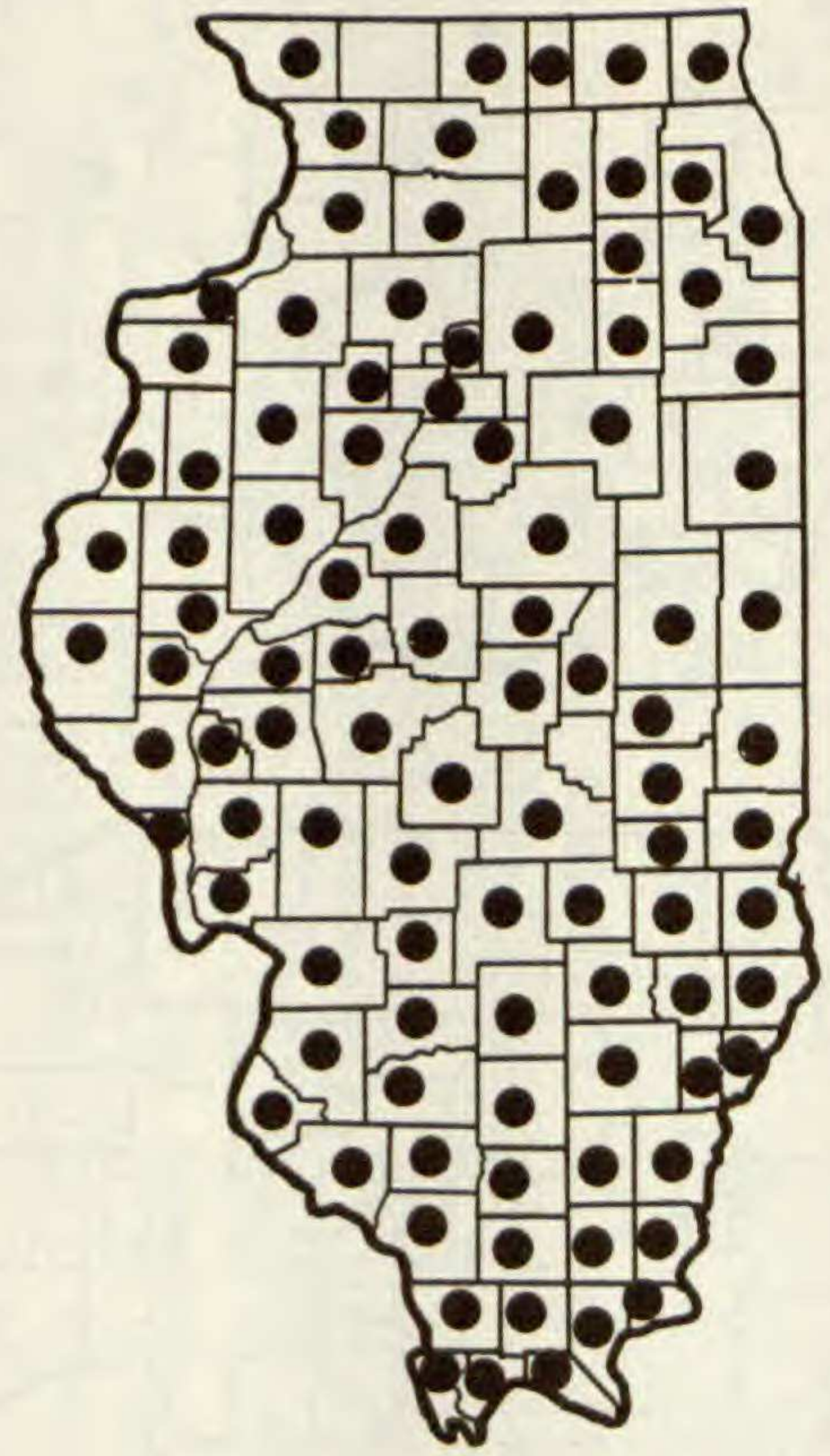


Map 2  
Juncus dudleyi Wieg.





Map 3  
Juncus interior Wieg.



Map 4  
Juncus tenuis Willd.



Map 5  
Juncus vaseyi Engelm.





Map 6  
Juncus greenei Oakes  
& Tuckerm.



Map 7  
Juncus gerardi Loisel.

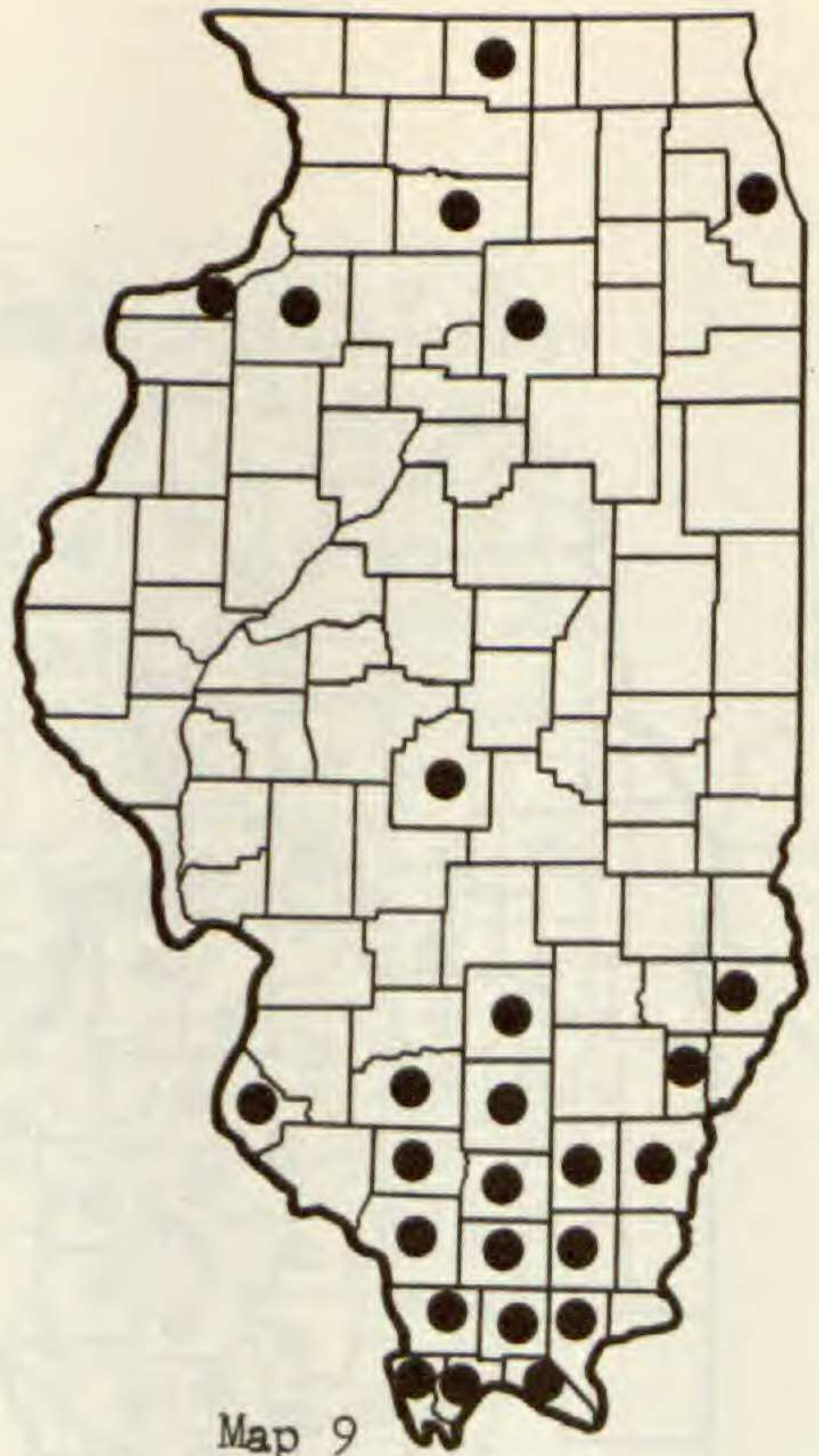


Map 8a  
Juncus bufonius L. var.  
bufonius





Map 8b  
Juncus bufonius L.  
 var. congestus Wahlb.

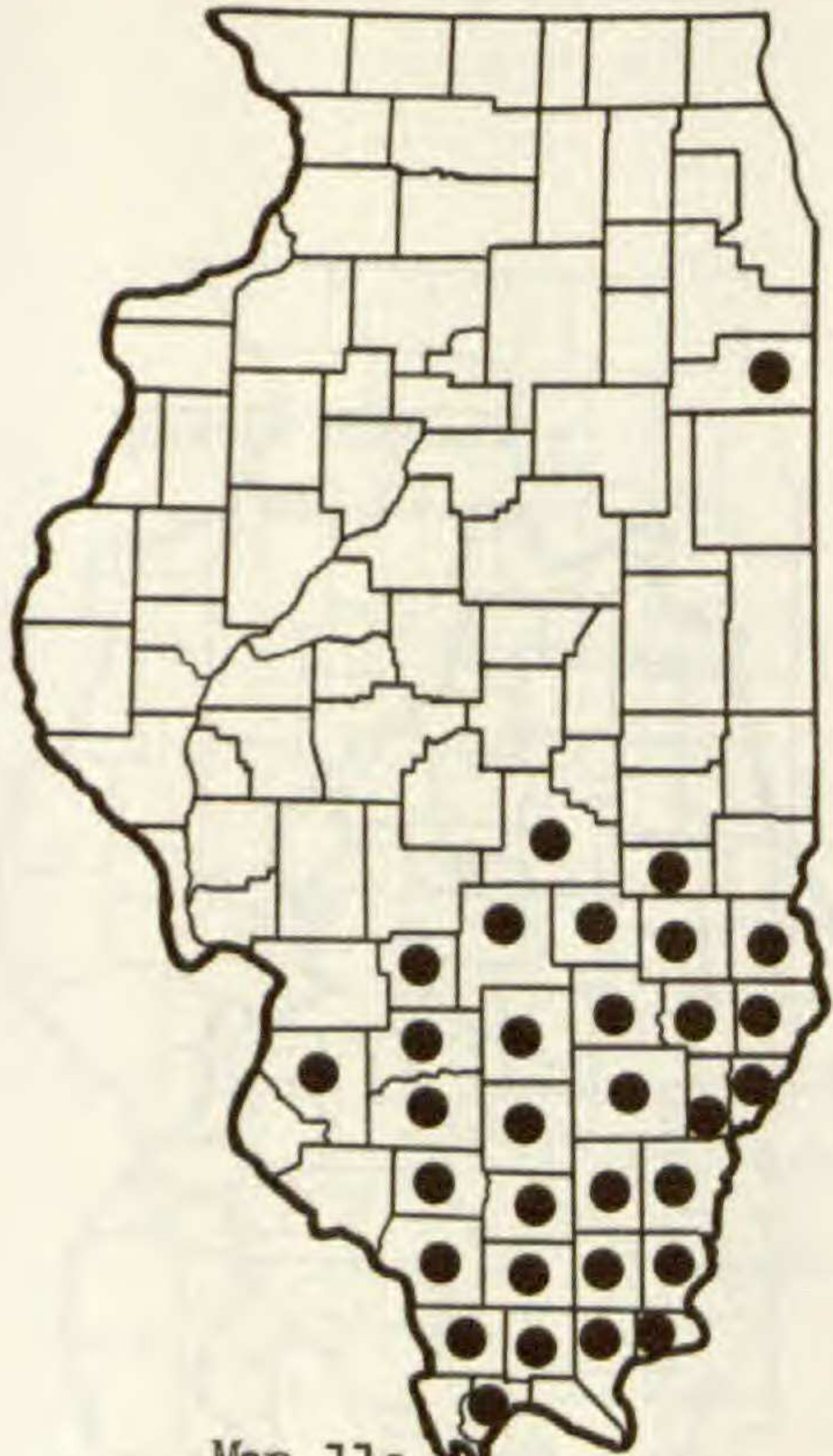


Map 9  
Juncus effusus L. var.  
solutus Fern. & Wieg.



Map 10  
Juncus balticus Willd.  
 var. littoralis Engelm.

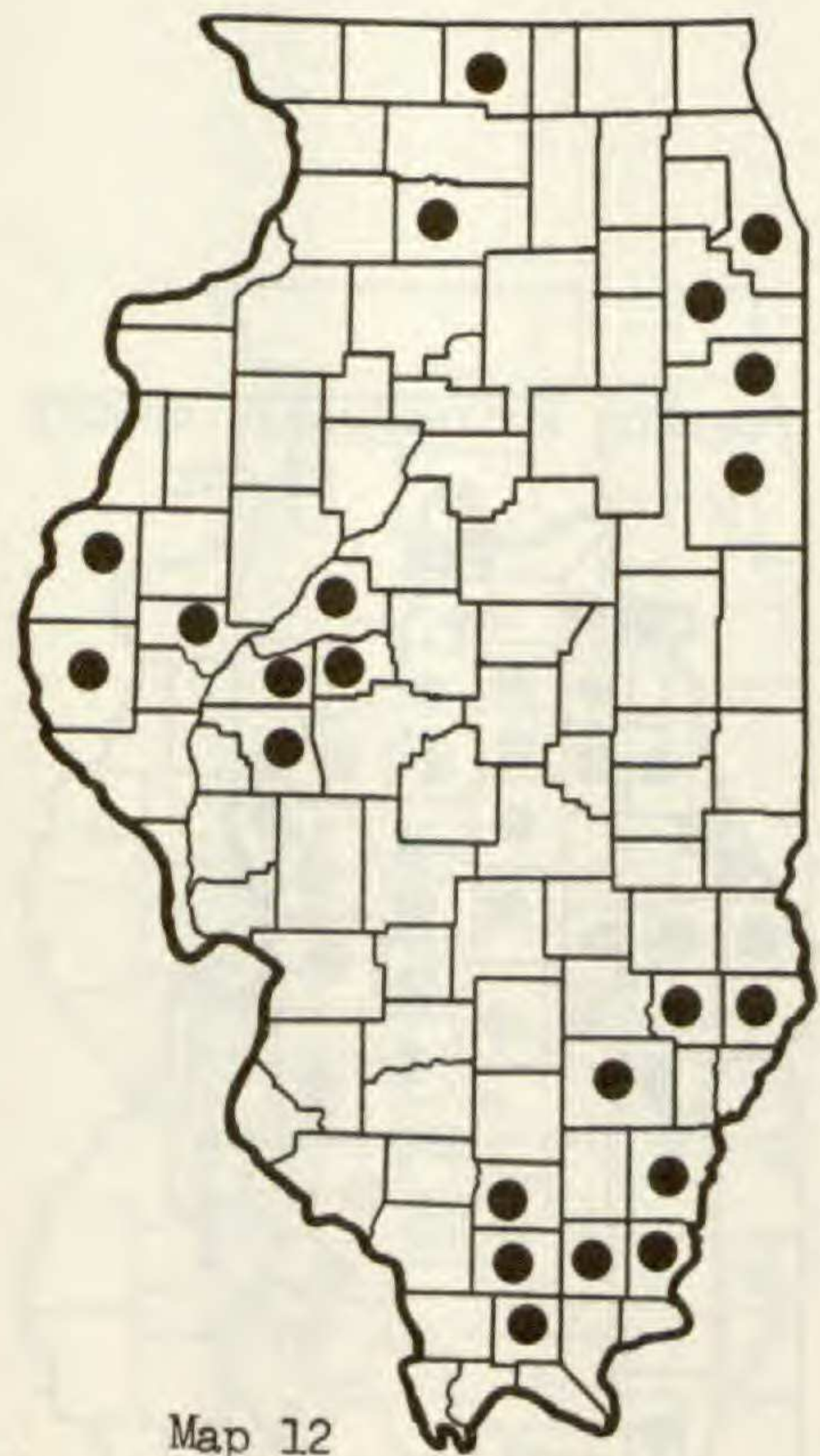




Map 11a  
Juncus biflorus Ell.  
f. biflorus

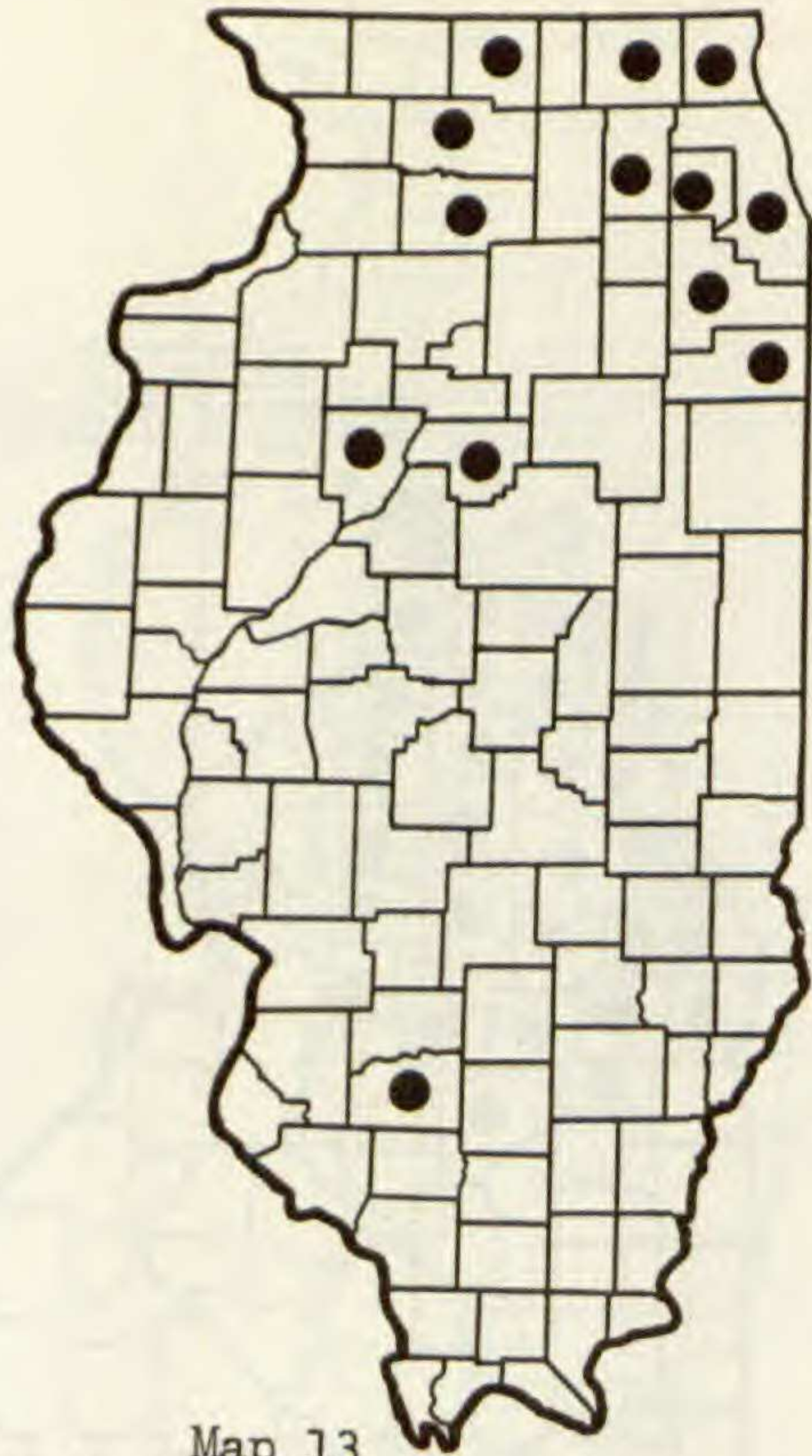


Map 11b  
Juncus biflorus Ell.  
f. adinus Fern. & Grisc.

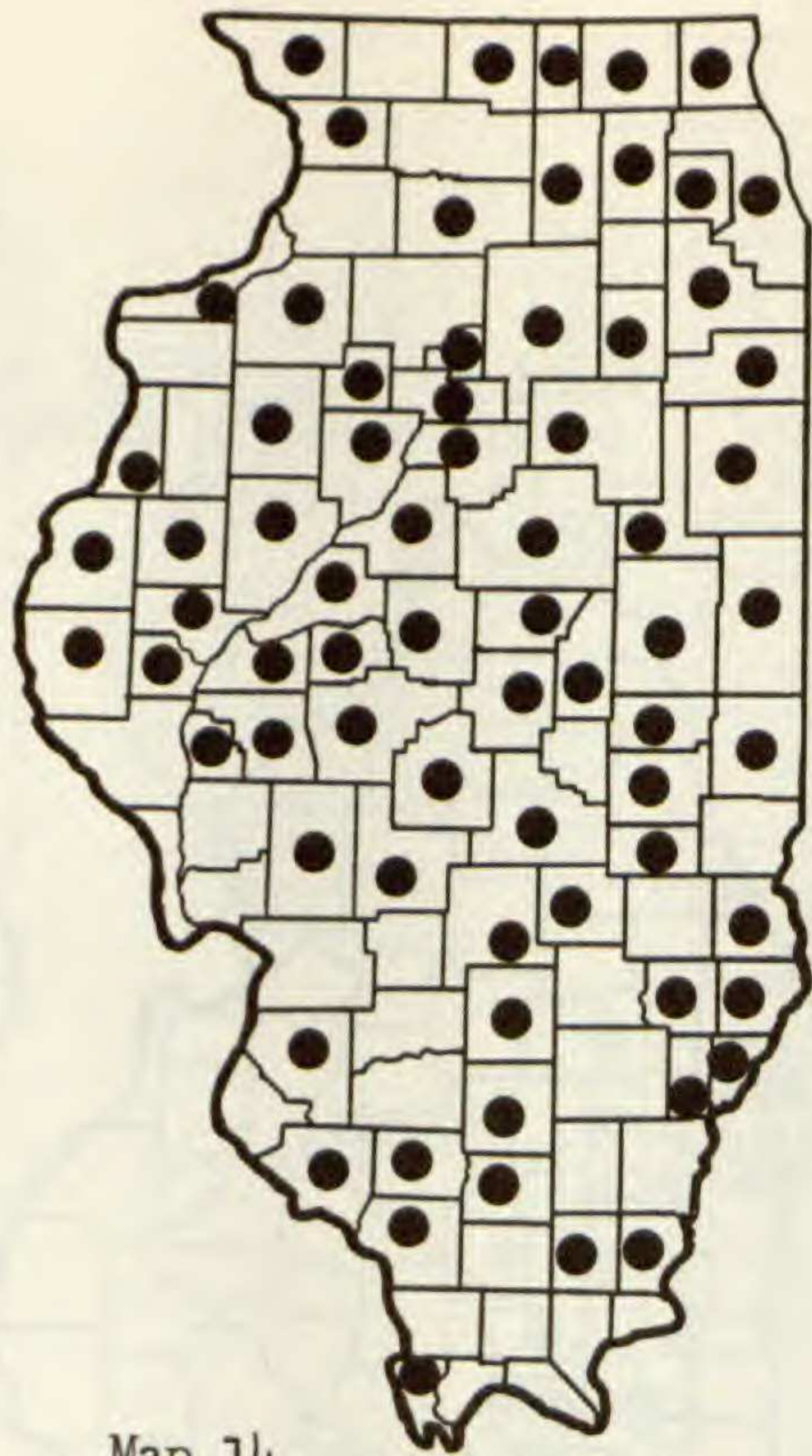


Map 12  
Juncus marginatus Rostk.

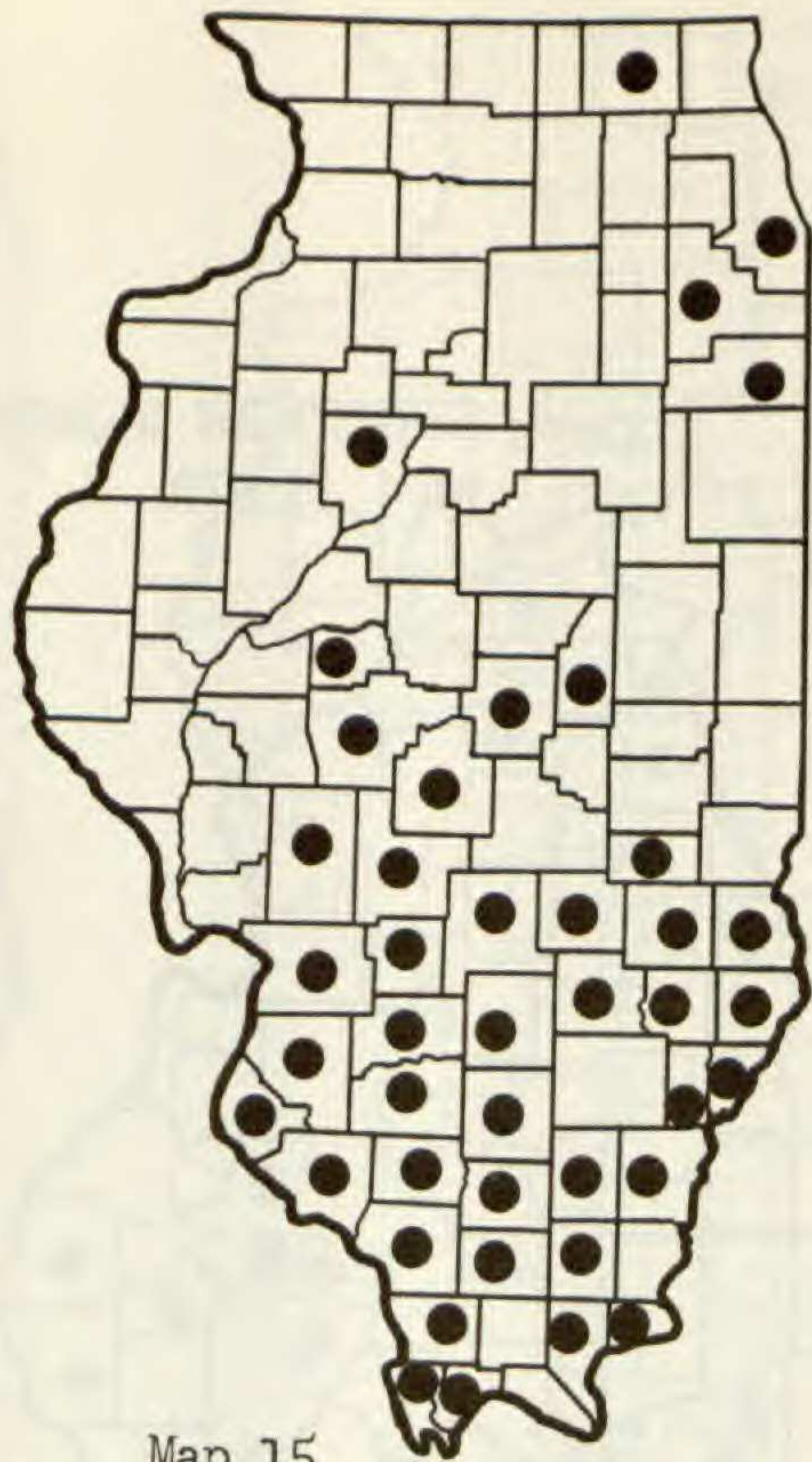




Map 13  
Juncus nodosus L.



Map 14  
Juncus torreyi Coville



Map 15  
Juncus brachycarpus Engelm.

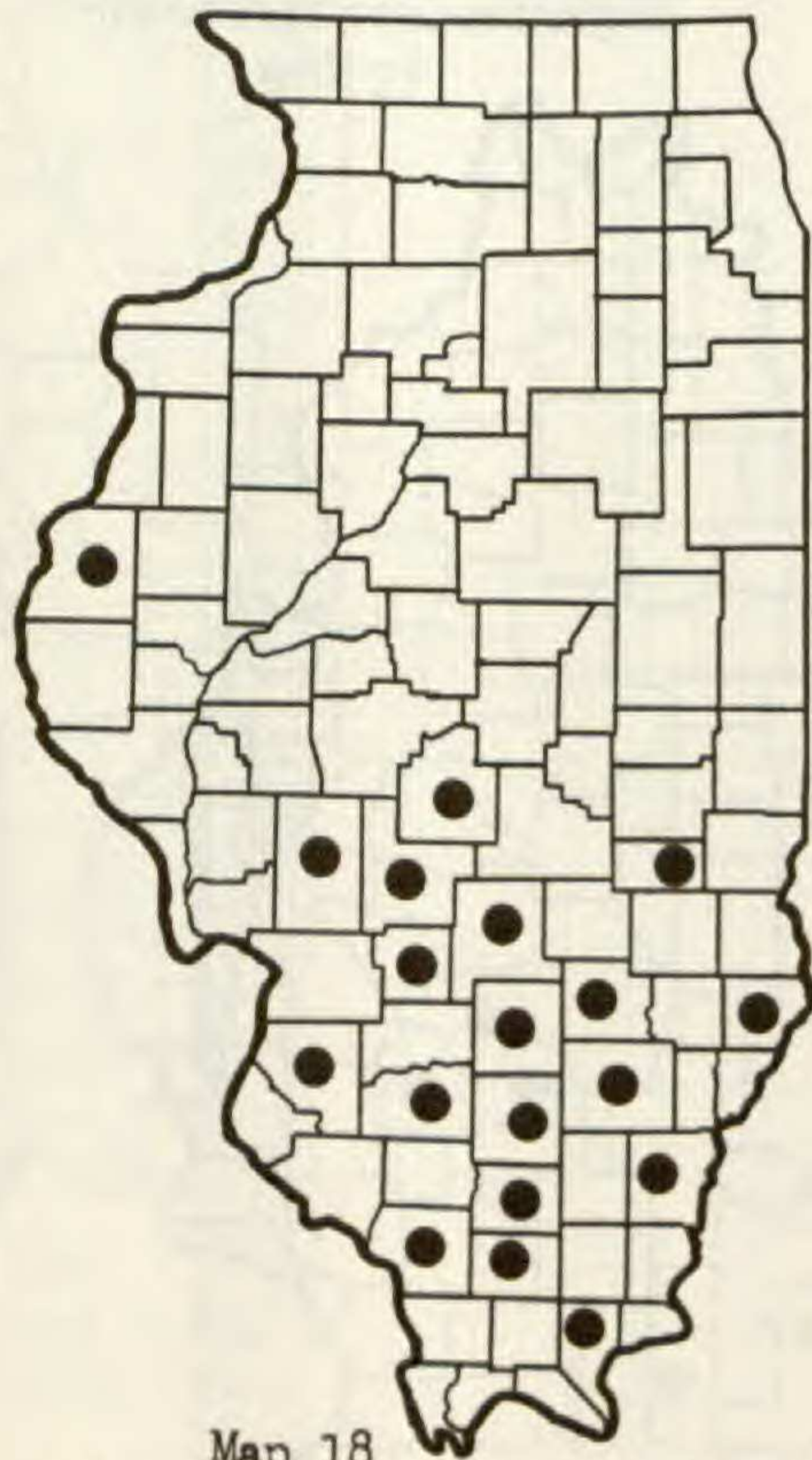




Map 16  
Juncus scirpoides Lam.

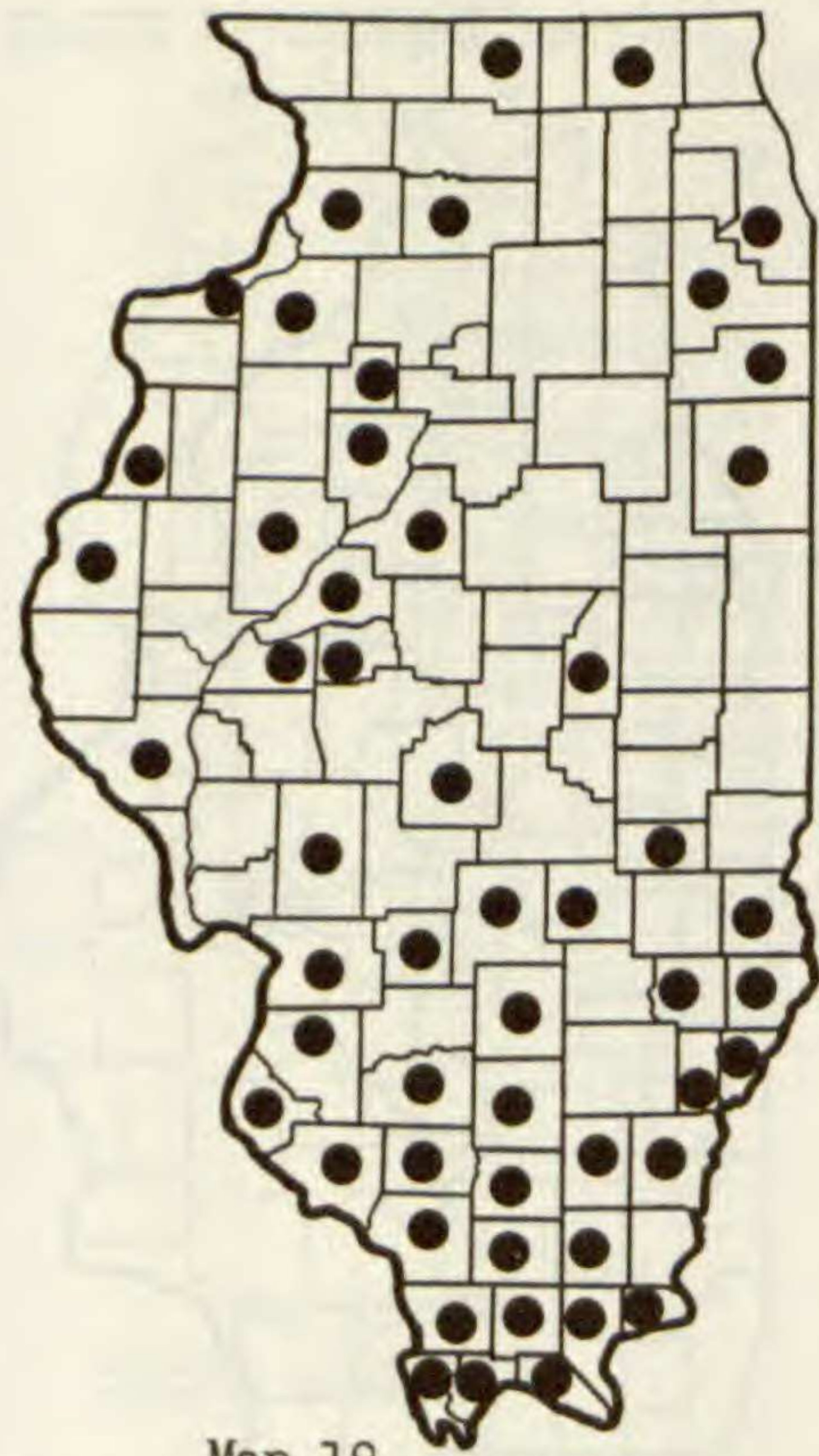


Map 17  
Juncus diffusissimus Buckl.

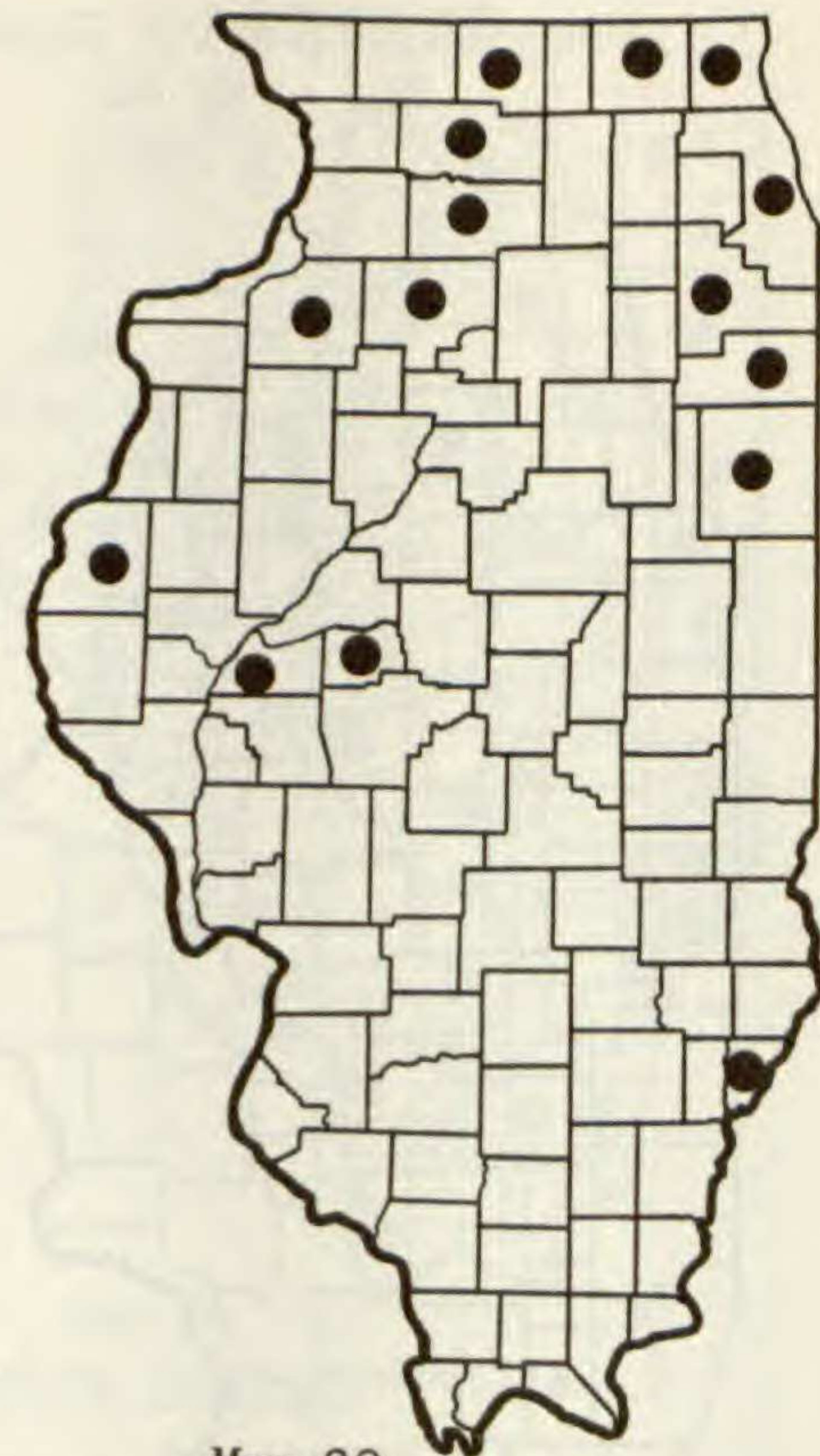


Map 18  
Juncus nodatus Cov.

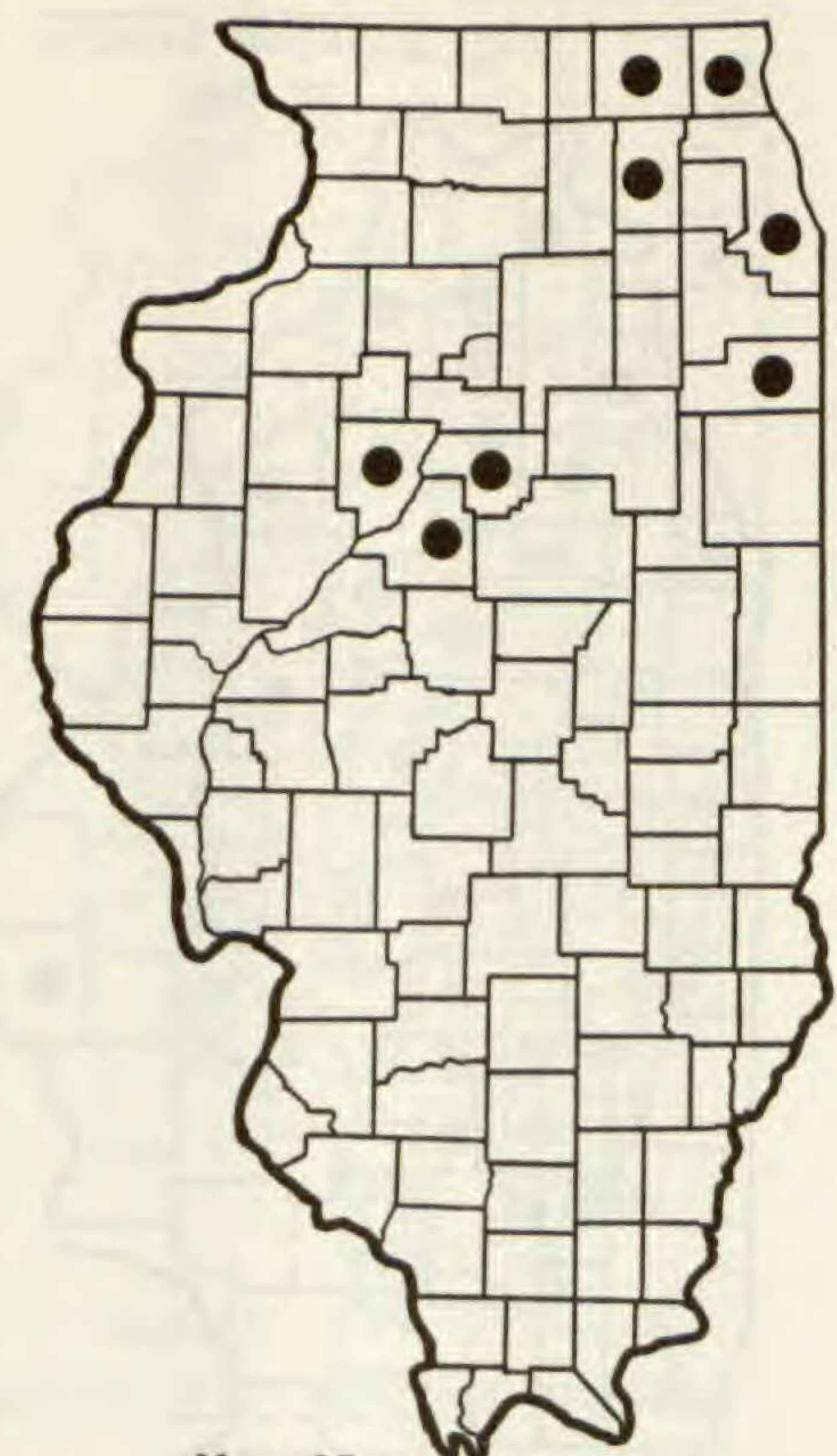




Map 19  
Juncus acuminatus Michx.



Map 20  
Juncus canadensis J. Gay



Map 21  
Juncus brachycephalus  
 (Engelm.) Buch.





Map 22a  
Juncus alpinus Vill.  
var. rariflorus Hartm.



Map 22b  
Juncus alpinus Vill.  
var. fuscescens Fern.



